ened specimens are often fruitless, besides rubbing the stick up and down the bark may strike the moth and ruin it for cabinet purposes. However, a "rousting" stick is indispensable, as the moths are sometimes out of the reach of the jar. Climbing may be resorted to in such cases where possible. Hot days are the best for Catocalæ hunting, but not necessarily sunshiny days.

It has been a puzzle to us to know just what elements of weather constitute a *Catocala* day. A sultry, sunshiny day was our first impression, but we sometimes found hot cloudy days just as good.

It is quite probable that after a night of rain the moths take refuge nearer the ground than at other times.

Often, unaccountably, there was a scarcity when we expected an abundance, and again when we expected little we reaped a real harvest, still on hot, bright days there were always moths to be found, high or low.

About dead stumps and old logs we never took other than *innubens* and *scintillans*, with an occasional *neogama*.

White-barked trees, like butternut and hickory, shelter the species with light colored upper wings, while the dark-barked trees furnish protection to the species with darker upper wings. As a matter of fact, each moth seeks the shelter that makes his color inconspicuous. So nearly are the bark and the closed upper wings of the moth alike in color that even a trained eye is often deceived, a most interesting case of protective coloration.

A new species of Eotettix (Acrididae) from Georgia.

By J. A. G. Rehn.

On January 6, 1906, Mr. Morgan Hebard took a male individual of this genus at Tyty Plantation, south of Thomasville and immediately north of the Florida line, in Thomas County, Georgia. The specimen proved to represent a very distinct new species, which I take great pleasure in dedicating to Mr. Hebard.

Eotettix hebardi n. sp.

Type.—♂. Tyty Plantation, Thomas Co., Georgia, January 6, 1906. Hebard collection.

Allied to *E. signatus* Scudder, but differing in the narrower interspace between the eyes, the broad frontal costa, the absence of distinct lateral carinæ on the cephalic section of the prozona, the rounded caudal margin of the metazona, the

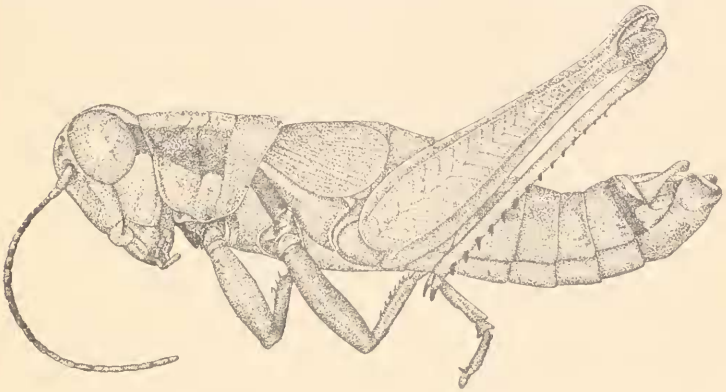

FIG. 1.—*Eotettix hebardi* n. sp. Lateral view of type. (x 4.)

slightly broader interspace between the mesosternal lobes, the shorter and more rounded tegmina, the shorter furcula, the clavate cerci and less distinct tubercle of the subgenital plate, as well as some details of the coloration.

FIG. 2.—*Eotettix hebardi* n. sp. Dorsal view of apex of male abdomen. (x 8.)

The form of the tegmina resembles *E. pusillus* Morse, but *hebardi* is separated from that species by the size and the form of the frontal costa. From *E. palustris* Morse the new form can be separated by the shape of the supra-anal plate and cerci and by numerous color characters.

The shape of the cerci, the rather thick blunt form of the prosternal spine and the lack of distinct lateral carinæ, as well as the broad frontal costa seen in this species are at variance with Scudder's generic description, but this probably requires modification as Scudder knew but one of the four species now credited to the genus.

Form slender, slightly compressed. Head with the occiput distinctly arched dorsad of the level of the pronotum; interocular space narrower than any portion of the frontal costa; fastigium distinctly but not strongly declivent, sulcate; face considerably retreating; frontal costa broad, slightly but regularly expanding ventrad, not sulcate; eyes large, moderately prominent when viewed dorsad, subovate in outline, the cephalic margin somewhat flattened, length about twice that of the infra-ocular sulcus; antennæ slightly longer than the head, pronotum and tegmina united, proximal joint narrower than the dorsal section of the frontal costa. Pronotum slightly tectate, the dorsum narrow, the greatest width contained nearly twice in the length; cephalic margin arcuato-truncate, with a very slight median emargination; metazona very closely and deeply punctate; median carina distinct but not high, lateral carina indicated only by a blunt angle on both the prozona and metazona, and a line of coarse punctures on the otherwise smooth prozona; principal tranverse sulcus distinct, cutting the median carina at a point distant from the caudal margin about two-fifths the pronotal length; lateral lobes very considerably longer than deep, the cephalic and caudal margins oblique, ventral margin obtuse-angulate. Tegmina about four-fifths the length of the pronotum, subovate, the greatest width about two-thirds the length, apical section rounded, subtruncate, veins moderately distinct and closely placed, the sutural margins of the tegmina separated by a space as wide as the frontal costa. Prosternal spine erect, slightly retrorse, thick, blunt. Interspace between the mesosternal lobes nearly twice as long as broad; metasternal lobes sub-attingent. Abdomen distinctly compressed, except caudad, the extremity being but slightly upturned. Furcula as long as the segment from which they arise, flattened, tips divergent. Supra-anal plate elongate-trigonal, deeply sulcate mesad, broadly and rather shallowly sulcate laterad. Cerci tapering in the proximal half, slender mesad, distinctly expanded distad, rounded dorsad, and with a rectangulate lobule ventrad, the distal half distinctly bent mesad, and falling slightly short of the tip of the supra-anal plate. Subgenital plate with the apical margin strongly curved, the apical tubercle thick, blunt and separated dorsad from the apical margin by a depression. Cephalic and median femora robust, inflated, the cephalic subfusiform. Caudal femora moderately slender; caudal tibiæ with fifteen spines on the external margins.

General color raw umber. Head with two widening patches of seal-brown on the occiput, postocular bars distinct and moderately wide, of shining black; eyes burnt umber. Pronotum touched with burnt umber dorsad; postocular bar present on the prozona, slightly broader than on the head and with the ventral border more undulate than the dorsad, shining black. Tegmina near Prout's brown. Abdomen with a broad bar of blackish on the lateral face, broken on most of the segments into a blackish suffusion or blackish spots on the caudal margins of the segment. Caudal femora touched with russet, the genicular arches and

the greater portion of the lobes on both faces blackish ; caudal tibiæ very dull olive-yellow, marked with blackish proximad and the spines of the same color.

MEASUREMENTS :

Length of body	22. mm.
Length of pronotum	5. "
Length of tegmen	3.6 "
Length of caudal femur	12.5 "

Mr. Hebard has kindly furnished the following note on the capture of the type : "The specimen was taken in the long-leaf pine (*Pinus palustris*) woods on a very cold day. All other forms of insect life seemed absent, but I noticed this individual springing about in the jasmine and wire grass with great alacrity. It spite of the cold it appeared vigorous, and when released from my pocket in a warm room, sprang about rapidly, jumping several feet at each spring.

Observations on Cicada tibicen L. and allied forms.

BY WM. T. DAVIS AND LOUIS H. JOUTEL.

Dr. Harris in his "Insects Injurious to Vegetation" describes *Cicada canicularis*, which he compares with *Cicada pruinosa* of Say. He also mentions in a foot-note *Cicada tibicen* of Linnaeus, which he states is even quite common within the limits of the City of New York. Prof. Uhler commenting on *canicularis* in another foot-note says : "this is nothing more than a local variety of *C. pruinosa* Say ; there is no persistency in the form and length of the abdominal valves, and the coloration and extent of pruinescence upon the insect depend upon various contingencies to which it is liable."

Mr. Chas. William Woodworth in his "Synopsis of North American Cicadidæ," published in Psyche, in June, 1888, follows the lead of Prof. Uhler, and under *Cicada tibicen* Linn., places as synonyms both *Cicada pruinosa* and *Cicada canicularis*. Most authors have, since Prof. Uhler's note, classed the three species mentioned by Dr. Harris as one, or at most have considered that *Cicada canicularis* might be entitled to specific rank.